



ENVIRONMENTAL • GEOTECHNICAL • GEOLOGY • HYDROGEOLOGY • MATERIALS

August 16, 2006
Revised October 2, 2006
Revised March 14, 2007

Mr. Robert Stark
White Mountain Estates, LLC
332 West Howell Drive
Ridgecrest, California 93555

Subject: **THIRD RESPONSE TO PEER REVIEW**
Phase 2 of Tentative Tract 37-46
White Mountain Estates Subdivision
Chalfant Valley, Mono County, California

Reference: Review of Revised Site Geologic Map
Phase 2 of Tentative Tract Map No. 37-46
White Mountain Estates Subdivision
Chalfant Valley, Mono County, California
Prepared by AMEC Earth & Environmental dated June 13, 2006

Mr. Stark:

This letter is revised to reflect the lot numbering and phase boundary changes shown on the latest rendition of Tentative Tract Map 37-46 (dated January 14, 2007), and it shall also serve as a response to the above-referenced peer review prepared by AMEC Earth & Environmental (AMEC). AMEC's letter presents three "bulleted" comments regarding their suggestions for clarification and additional information per Section 3 titled, "Tentative Tract 37-46", which are reiterated in bold type and followed by our responses, as follows:

- **Summary of Active Fault Mapping**
The active traces mapped within the proposed development included 5 significant fault traces and numerous subsidiary traces. No less than 90 mapped fault traces within the limits of Tract 37-46, are shown on the current Site geologic Map. Typically the significant faults and many of the subsidiary traces are characterized by steeply inclined breaks with north to northwesterly trends. However, many of the mapped traces depart from the general trend or orientation by as much as 30 to 40 degrees and only short fault segments are shown as linear features. The complexity of the existing fault patterns makes the typical method of linear projection of fault traces from known exposures within exploratory trenches to unexplored areas suspect as the distance of projection increases. The complexity and intensity of recognized faulting has made the determination of habitably [sic] building sites within Tentative Tract 37-46 difficult and costly.

Response: The above summary is noted and acknowledged.

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- **Determination of Habitable Areas**

Based on the geologic conditions exposed in 10 exploratory fault trenches, mapping of existing exposures, conditions observed in aerial photographs and review of referenced geologic materials four habitable areas have been established by the project geotechnical consultant within Tentative Tract 37-46. The three habitable areas, within Lots 39, 40 and 41 through 43, are approximately 450 to 500-feet long and only 50 to 100-feet wide. The fourth habitable area, within Lot 44, is roughly equidimensional. The proposed habitable areas are at least in part based upon the linear projection of active fault conditions exposed within fault trenches which roughly cross the trend of faulting but are as much as 500 feet apart. At some locations the outline of the habitable area is based on projections that are 200 to 270 feet from known fault locations within a specific fault trench. Obviously, the level of certainty regarding the lack of active faulting within a specific habitable zone diminishes as the distance from known exposures increases particularly within the zones that are relatively long and narrow. As a result, the habitable areas, immediately adjacent the fault trenches are much more like [sic] to be free of active faulting then [sic] portions of the habitable areas that are 200 [feet] or more away. Based on the above it is AMEC's opinion that the existing recommended habitable zones as shown on the revised Site Geologic Map be considered areas within which the evidence that demonstrates the lack of active faulting diminishes as the distance from the existing fault trenches increases. It may be more appropriate to designate these areas as zones with limited evidence of active faulting.

Response: The above opinion is noted and acknowledged. With respect to the last sentence in the bulleted paragraph above, our response to the bulleted paragraph below presents additional evidence to substantiate the lack of active faulting within the established habitable areas.

- **Building Areas**

Due to the uncertainty associated with the location or projection of active fault features from the existing exploratory fault trenches it is recommended that Minimum building areas be established for each lot within the existing habitable zones. Building areas that can be established immediately adjacent the existing fault trench excavations are approved with respect to active faulting based on the existing data. Proposed building areas that are more than 50 feet from an existing fault trench will require additional subsurface fault trenching to establish that the building area is free of active faulting. The location of any proposed additional fault trenches, to substantiate the validity of a proposed building area, should be reviewed and approved by the geotechnical consultant for Mono County prior to excavation and logging. The designation of acceptable building areas, verified by the existing fault trench data or new fault data as discussed above, should be accomplished prior to Mono County's approval of the tract.

Response: Two additional fault trenches were proposed and located upon approval via telephone and email from the geotechnical consultant (AMEC) for Mono County. Each trench was located to provide additional data within those habitable areas that had been previously established by rather lengthy projections. Additional Fault Trench T-11 was excavated and logged across the habitable zone that traverses proposed Lot 43, and additional Fault Trench T-12 was excavated and logged across the habitable zone that traverses proposed Lot 41. Each trench exposed faulting OUTSIDE of each habitable

zone as was anticipated from our previous findings. Faulting was NOT observed within either habitable zone on either lot. Therefore, we have revised each habitable zone to reflect these findings, and they are shown on the attached Revised Site Geologic Map. Based on the dimensions of the largest footprint of the manufactured homes that are proposed for the subject site, Minimum Building Areas (MBA) have also been established for each lot within each revised habitable zone. It should be noted that each MBA location is provided to demonstrate fit and buildability within the habitable zone only; they are not intended to restrict structures to that location or dimension. The west side of the habitable zone across Lots 40 and 42 has been revised such it is now setback fifty feet from the nearest mapped fault to the west, and as a result the MBA on Lot 42 has been repositioned inside the habitable zone such that there is still adequate room for a habitable structure. Additionally, the habitable zone has been removed from proposed Lot B Common Area for Phase 1 of Tentative Tract 37-46 since the proposed water storage tank and propane tanks are not habitable structures; however, their proposed locations have been plotted such that they are as far away as possible from the nearest mapped faulting on this lot in order to minimize the potential for disruption or damage to the tanks from future ground surface rupture-causing events.

This opportunity to be of additional service is appreciated.

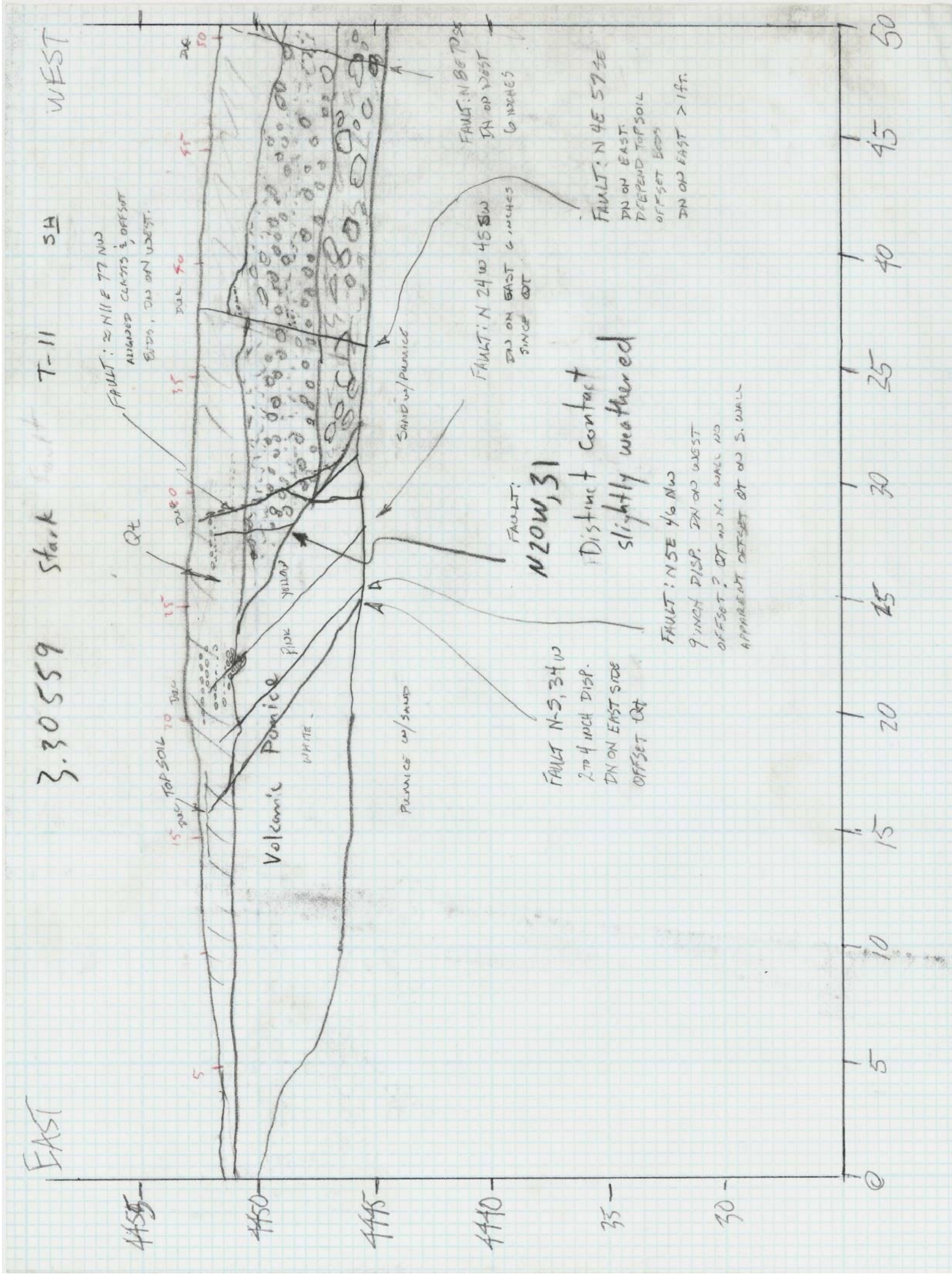
Respectfully,
SIERRA GEOTECHNICAL SERVICES, INC.

H. Dean Dougherty, III
Professional Geologist No. 6497

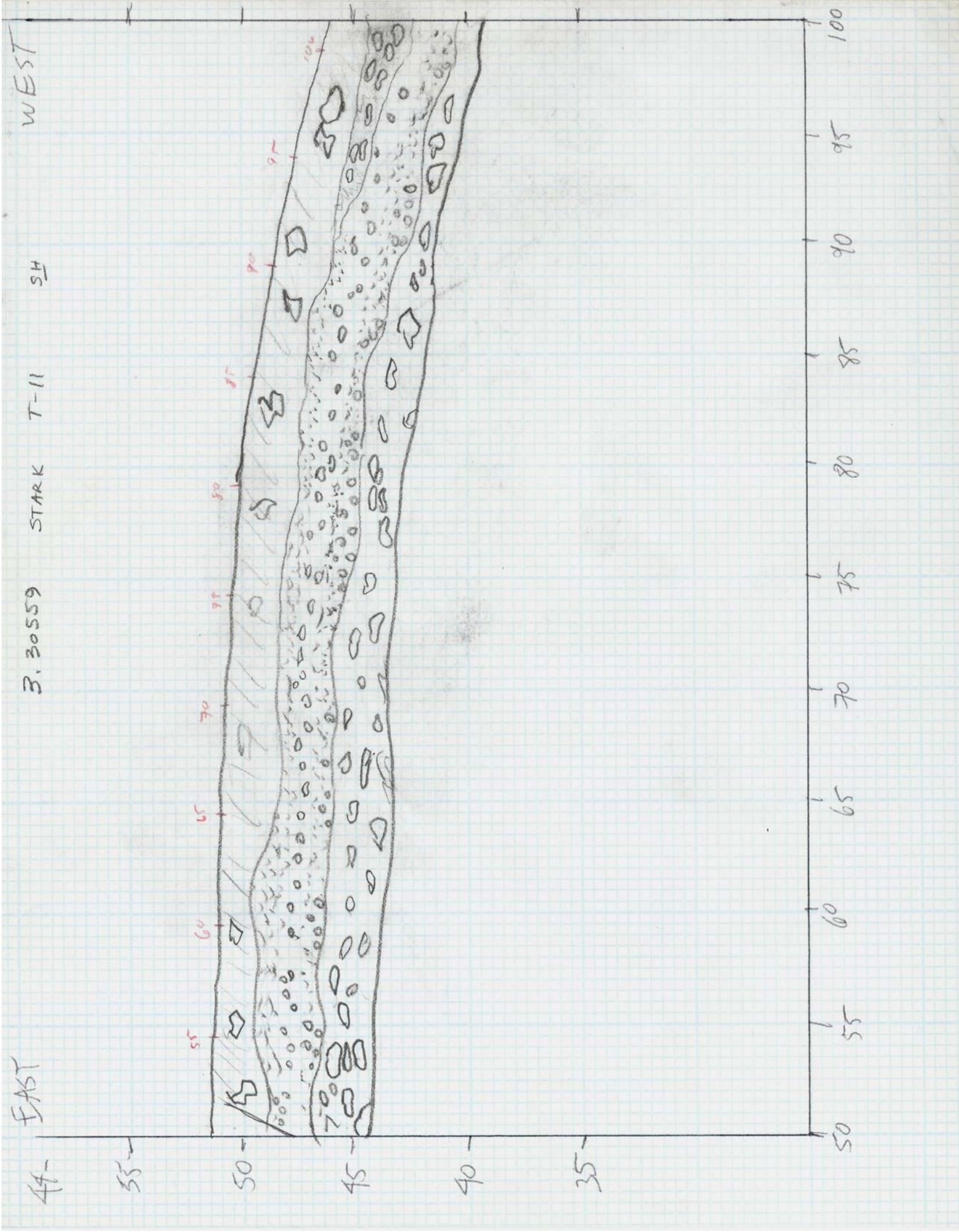


Attachments: Geologic Log of Trench T-11, Sheets 1 – 5 of 5
Geologic Log of Trench T-12, Sheets 1 – 6 of 6
Revised Site Geologic Map, Plate 1 (Revised March 14, 2007)

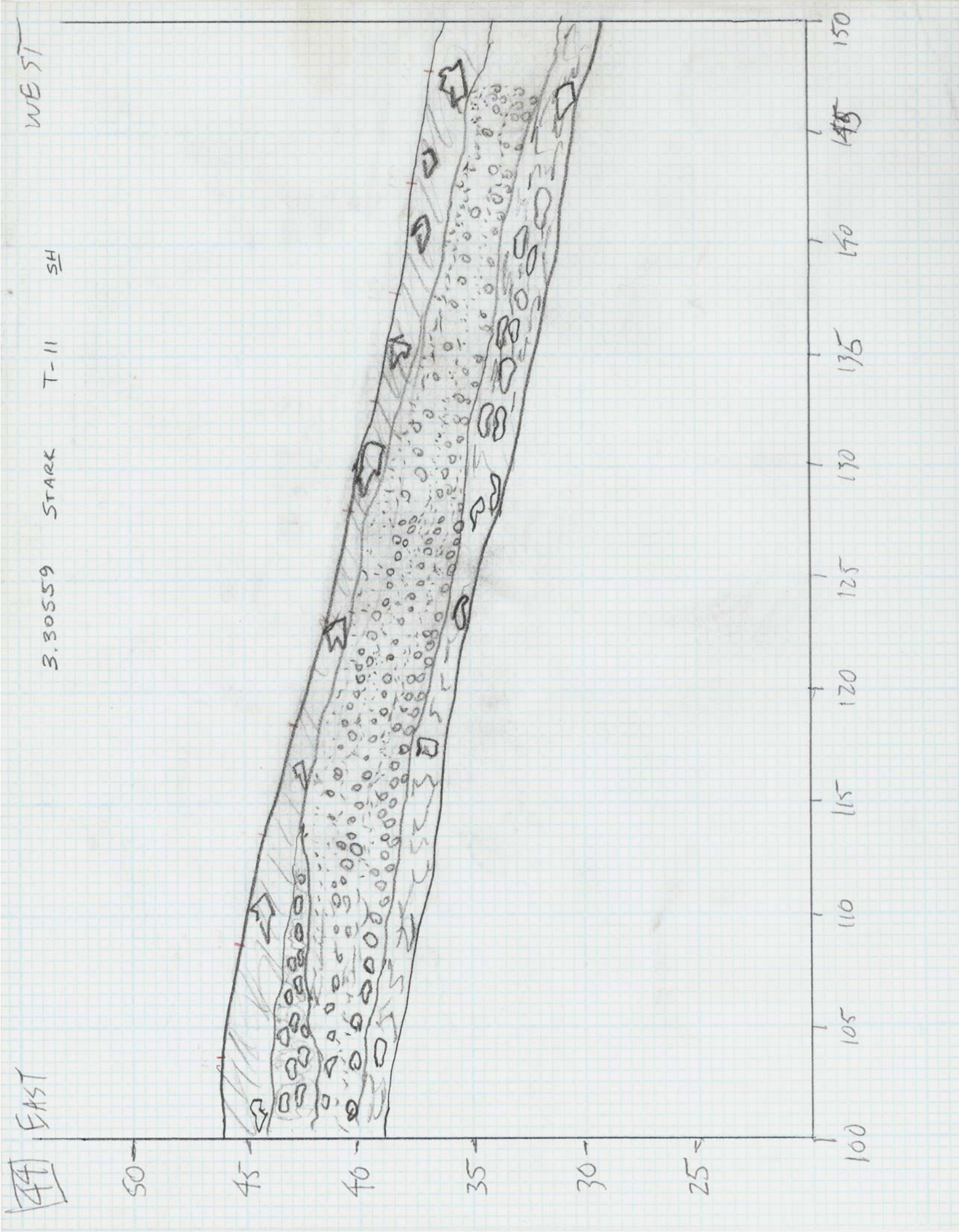
GEOLOGIC LOG OF TRENCH T-11
SHEETS 1 – 5 OF 5



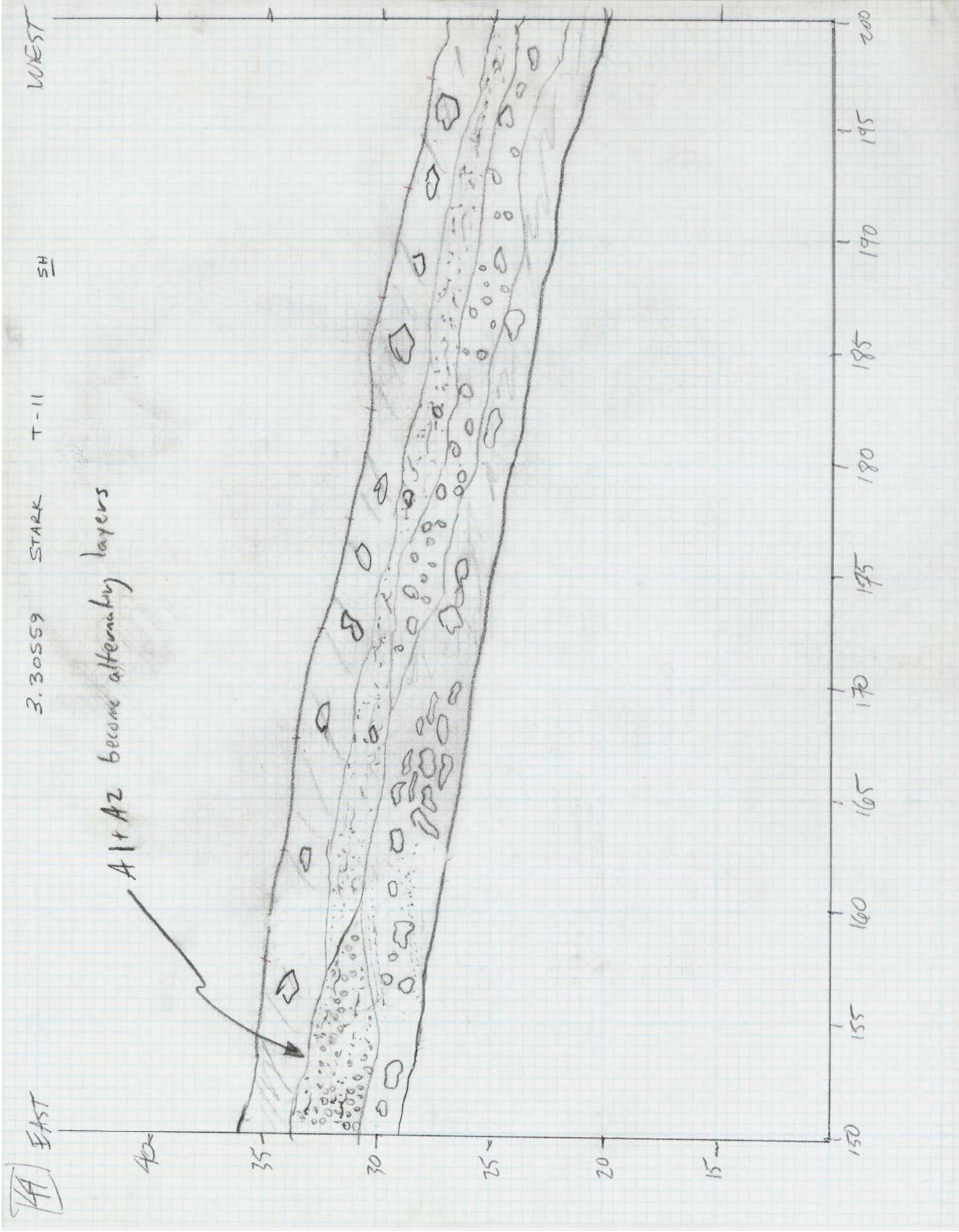
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DRAWING: 3.30559_TRENCHES.DWG	LOGGED BY: HDD/RWS	DRAFTED BY: HDD/RWS		
JOB NO: 3.30559			TITLE: SHEET 1 OF 5	



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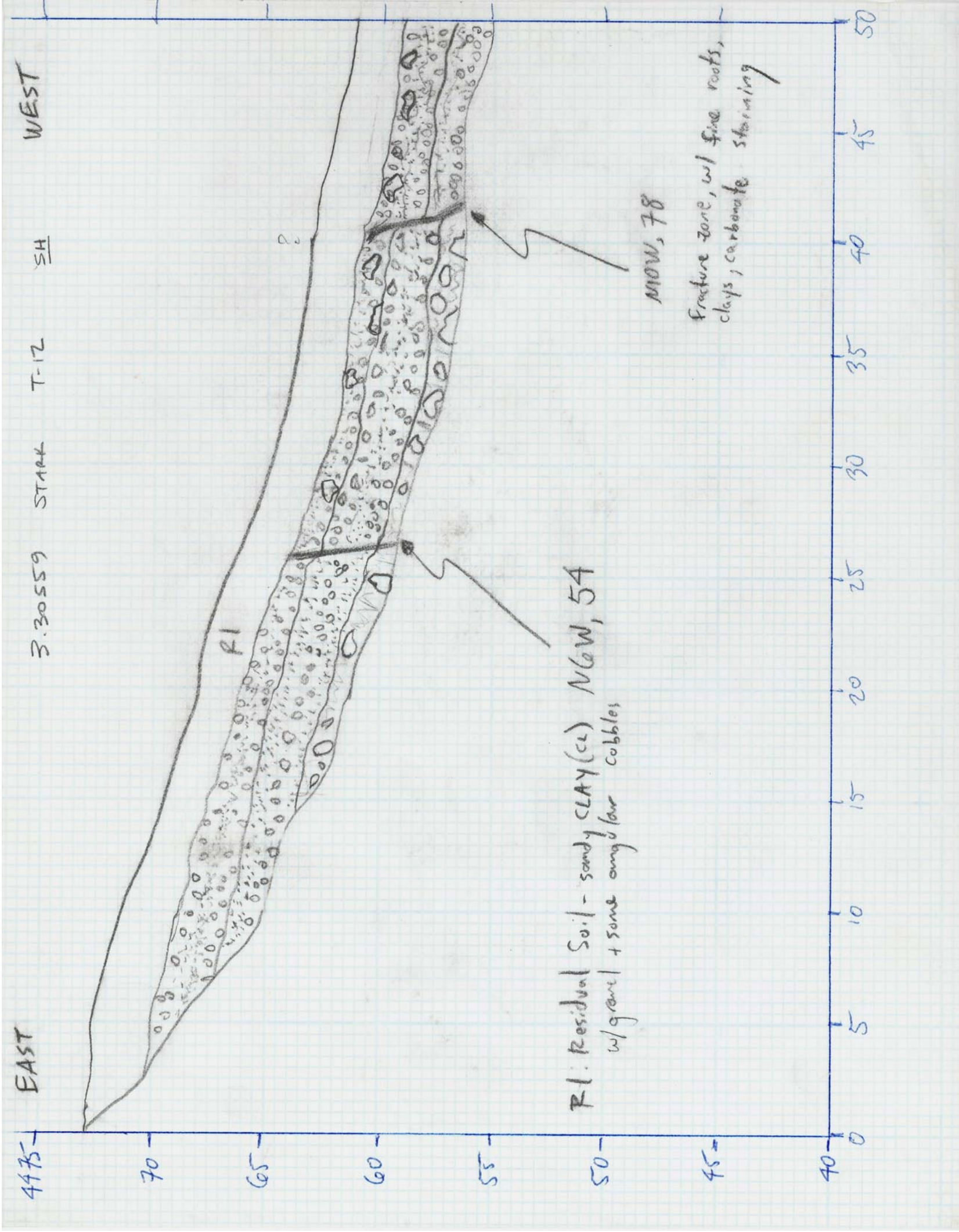


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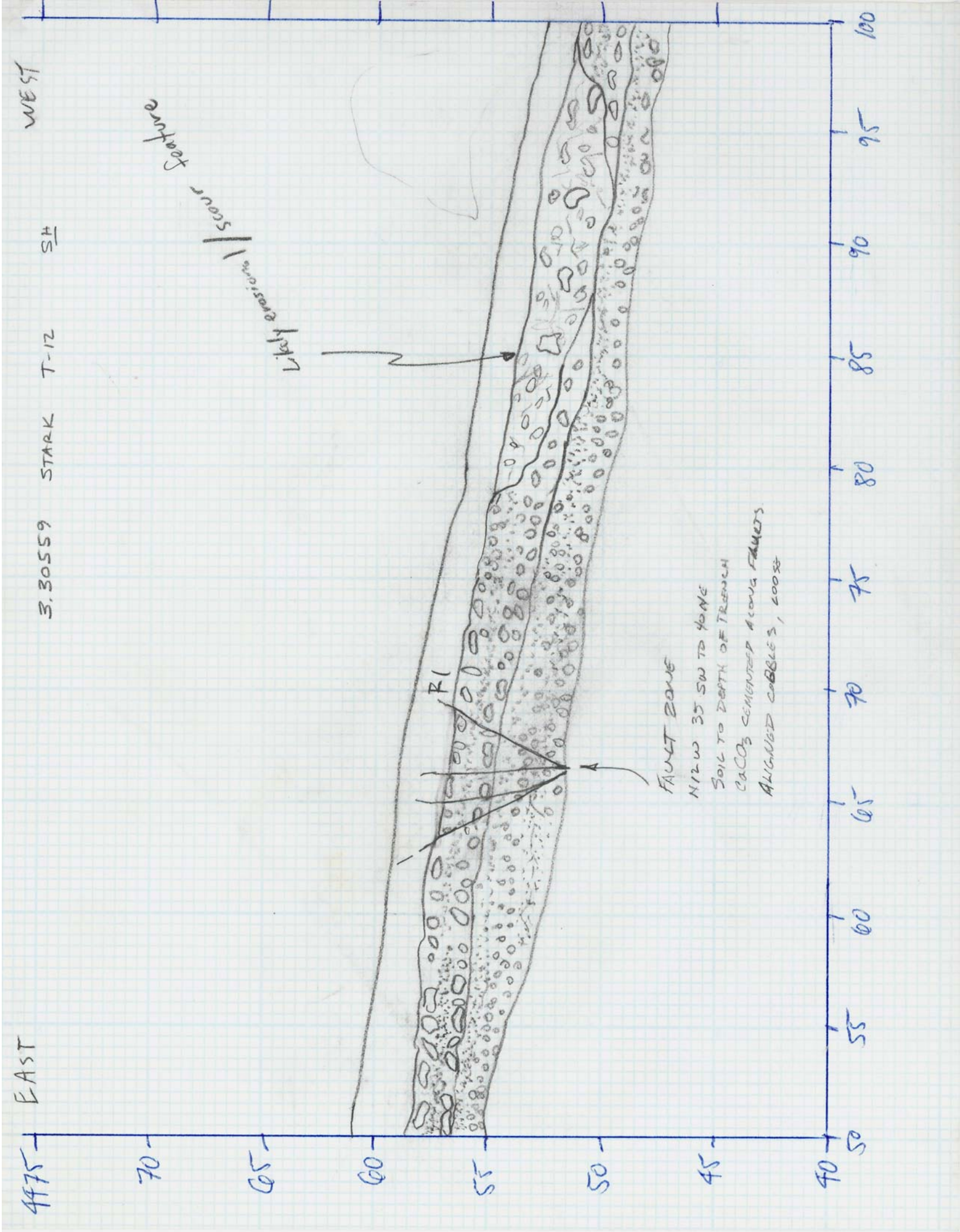


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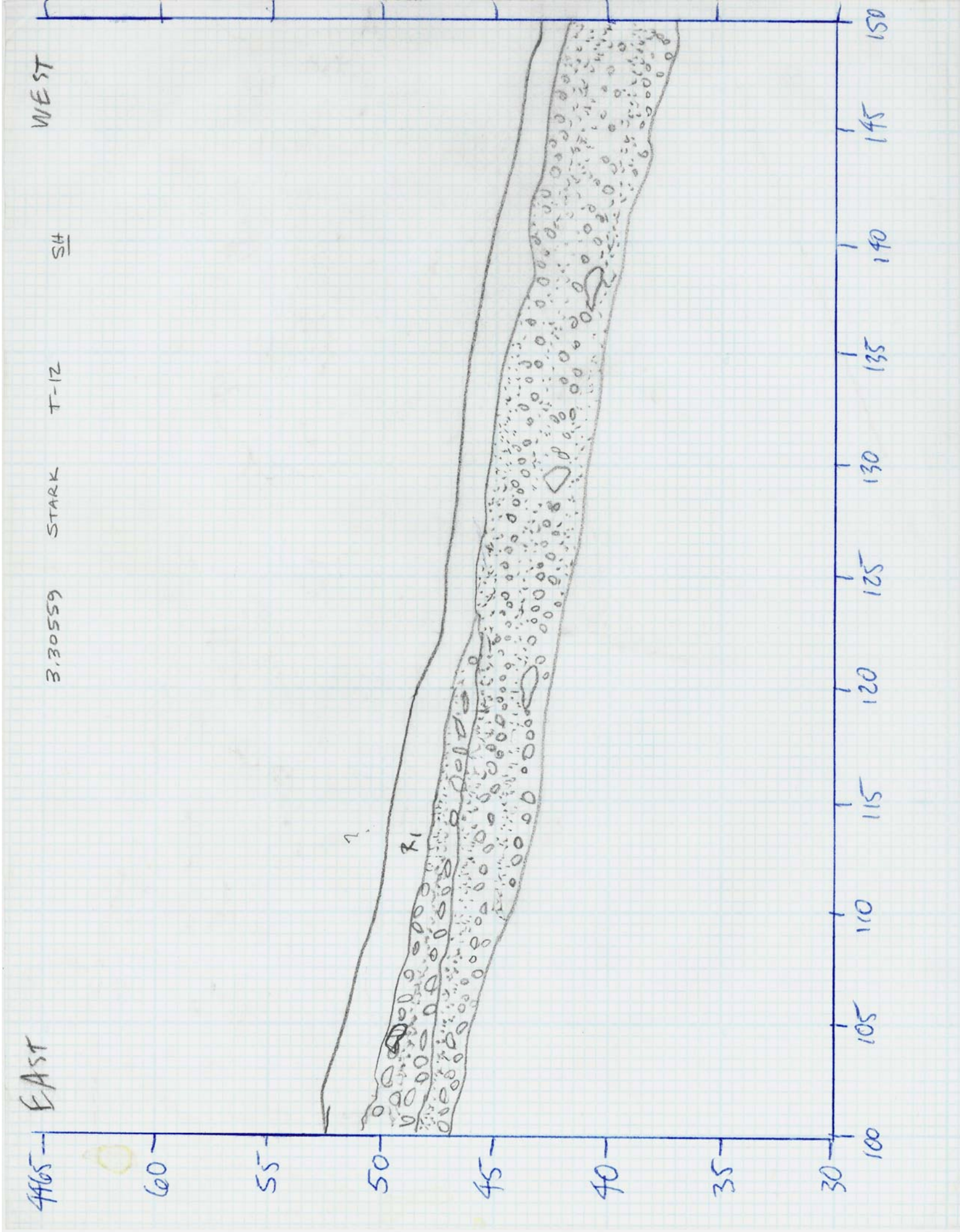
GEOLOGIC LOG OF TRENCH T-12
SHEETS 1 – 6 OF 6



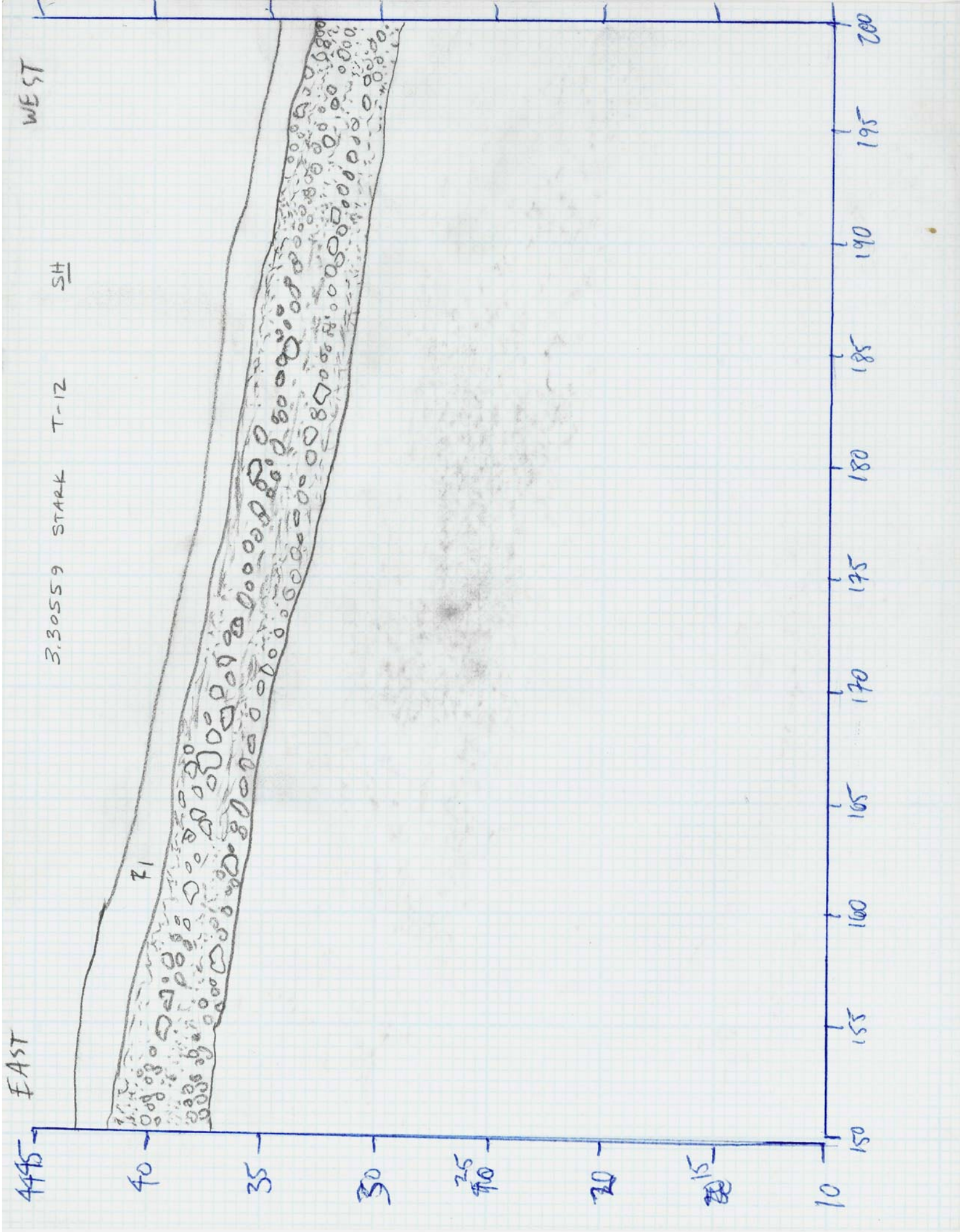
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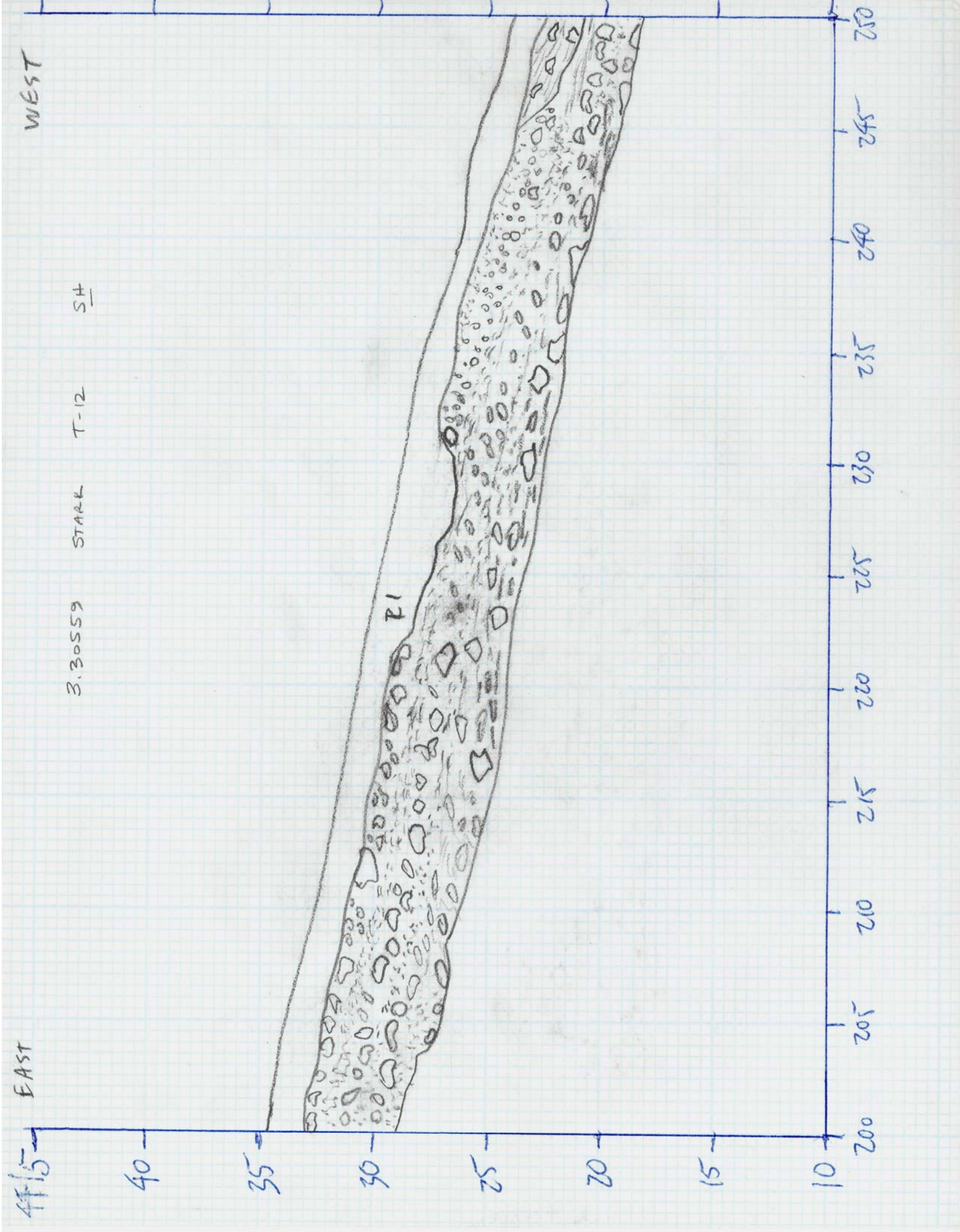
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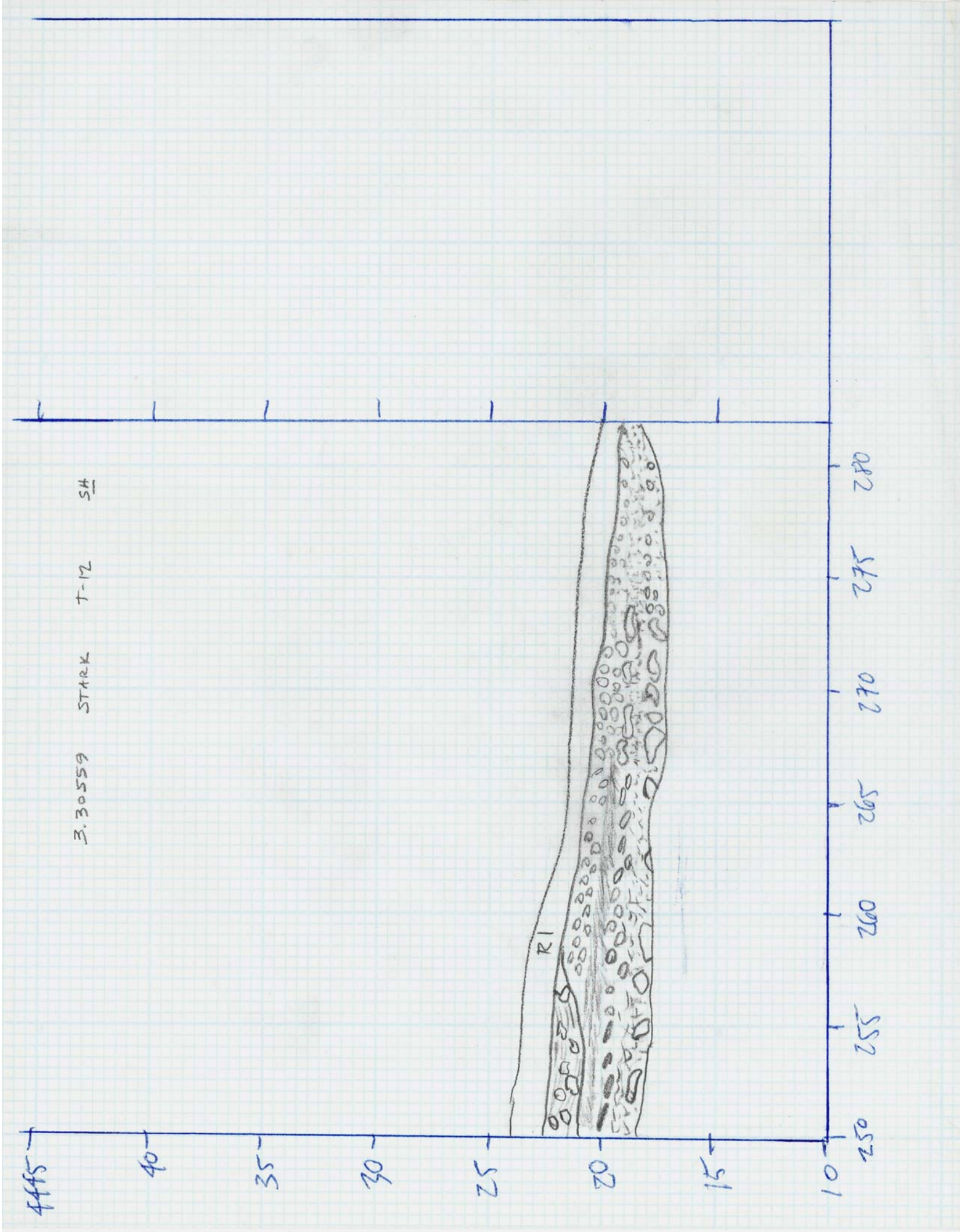
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REVISED SITE GEOLOGIC MAP
PLATE 1 (Revised 10/2/2006)

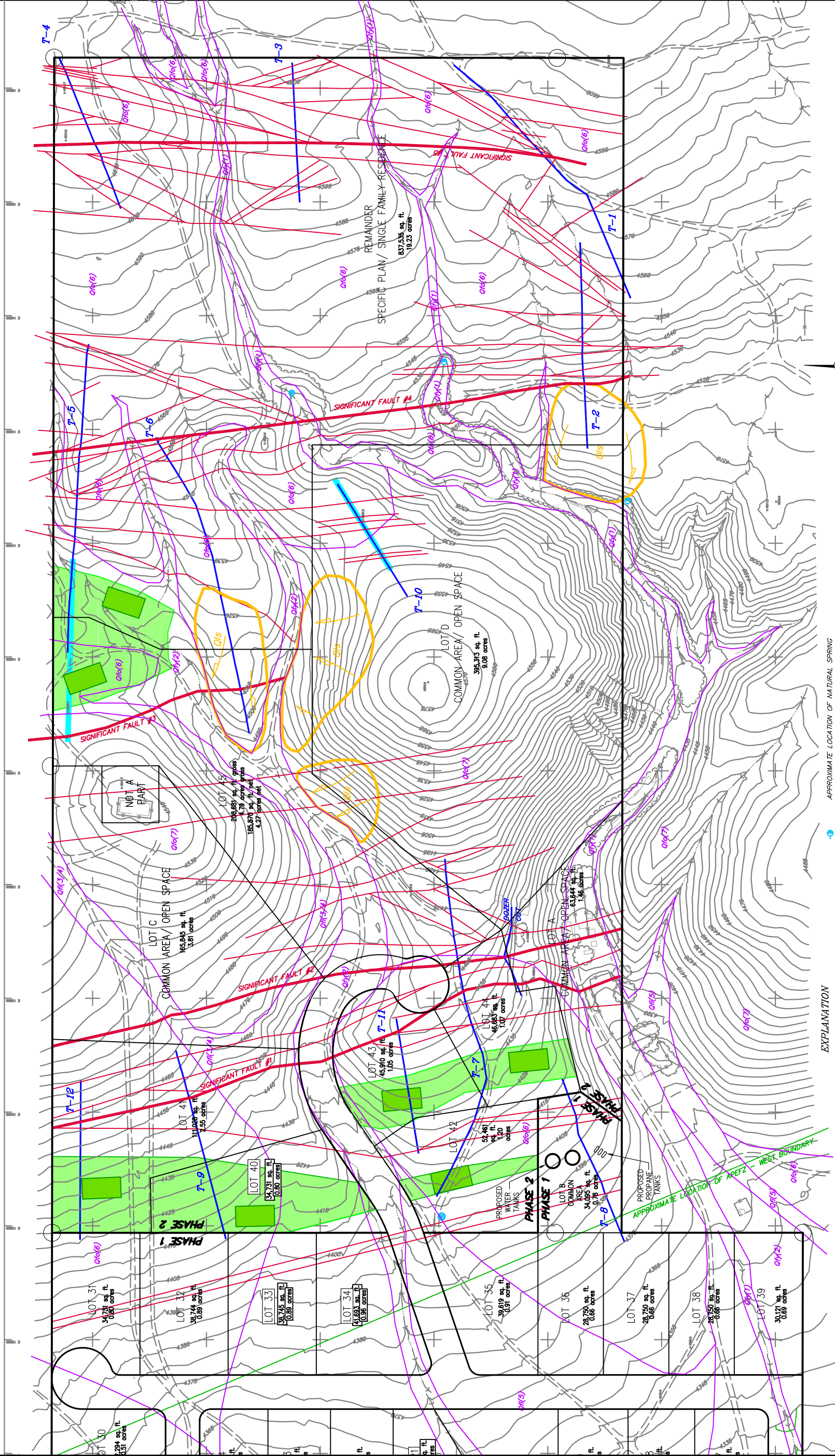
PREPARED FOR WHITE MOUNTAIN ESTATES, LLC - MR. BOB STARK

SOILS ENGINEERING	ENVIRONMENTAL	MATERIALS TESTING
GROUNDWATER		GEOMATERIALS

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EXPLANATION

RECOMMENDED HABITABLE ZONE BOUND BY BUILDING SETBACK LINE FOR PHASE 2

APPROXIMATE LOCATION OF DEEPEEN EXPLORATORY FAULT TRENCH

APPROXIMATE LOCATION OF EXPERIMENTAL FAILURE TRENCHES

APPROXIMATE LOCATION OF SIGNIFICANT FAULTS

[illegible]

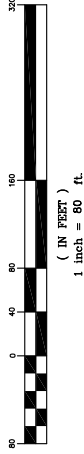
APPROXIMATE LOCATION OF NATURAL SPRING
HOLOCENE-AGE FAN, CHANNEL, AND ALLUVIAL APRON PER SCHELL (2001)

LATE PLEISTOCENE AGE FAN PER SCHELL (2001)

NOTE: PARANTHETICAL NUMBERS 1 THRU 7 INDICATE RELATIVE AGE FROM MIDDLE TO EARLY PLEISTOCENE-AGE FAN/SURFACE PER SCHELL (2001).

APPROXIMATE LOCATION OF LANDSLIDE

GRAPHIC SCALE



REVISED 3/14/2007 - 50' SETBACK ON LOTS 40 & 42; OMIT HABITABLE ZONE ON COMMON LOT B PER AMEC